

Important: These instructions assume you always use the same raijin login to launch a simulation and produce your analysis.

Work area

You will work out of a directory named: `/g/data/hh5/WS2019/$USER`

You first need to create this directory and move to this directory:

```
mkdir /g/data/hh5/WS2019/$USER
cd /g/data/hh5/WS2019/$USER
```

Load the mk3l module

Run the commands:

```
module use /g/data/hh5/public/modules
module load mk3l/1.2
```

Job scripts

Go to your work area:

```
cd /g/data/hh5/WS2019/$USER
```

Copy the job scripts to your area:

```
cp -r $Mk3LHOME/core/WS2019_scripts .
```

The script that was used to run the control experiment and to base your experiments on is

```
qsub_raijin_ct101
```

With the input file

```
input_ct101
```

Input files

If you need to modify an input file.

1. Find the path of the file you need to modify in the job script.
2. Copy this file locally (you might want to put it under `/g/data/hh5/WS2019/$USER/modif_data`)
3. Modify the data in your local copy
4. Modify the job script to copy your modified input instead of the standard input for the job.

Example: if you need to modify the CO2 data to 500ppm.

1. In the job script, you find the CO2 data comes from:
`$Mk3LHOME/core/data/atmosphere/co2/co2_data.280ppm.181`
2. Copy the file locally:
`cp $Mk3LHOME/core/data/atmosphere/co2/co2_data.280ppm.181 /g/data/hh5/WS2019/$USER/modif_data/co2_data.500ppm.181`
3. Modify the local file as needed.
4. In the job script, change this line:
`cp $Mk3LHOME/core/data/atmosphere/co2/co2_data.280ppm.181 $PBS_JOBFS/co2_data.181`
to

```
cp /g/data/hh5/WS2019/$USER/modif_data/co2_data.500ppm.181
$PBS_JOBFS/co2_data.181
```

Walltime

Each year of model run takes approximately 20min of walltime, but it gets slower the more years have been running, so for 50 years it requires ~24h.

End of the lab

Once you have finished analysing everything on Thursday (or Wednesday if you prefer), please run these commands:

```
setfacl -R -m m::rwx /g/data/hh5/WS2019/$USER
setfacl -R -m g:hh5_w:rwX /g/data/hh5/WS2019/$USER
```

These commands ensure we can clean up the space without hassle after the Winter School.